

Ma 082 ~ Geometry PreTest Study Guide

For this test, you will have to demonstrate proficiency in the following skills:

- Solving problems that require understanding of the definition of Complementary and Supplementary angles
- Using the *Interior Angles Sum Theorem** to find the sum of the angles in various parallelograms
- Classifying triangles according to angles and sides (equilateral, isosceles, scalene/acute, right, obtuse)
- Solving problems that involve angles formed by parallel lines (corresponding, vertical, alternate interior and exterior)
- Determining the number of lines of symmetry in a given figure
- Classifying quadrilaterals (is it just a quadrilateral? a parallelogram? a rectangle? a rhombus? a square? or more than one of the above?)
- Using the *Pythagorean Theorem** to find the length of a missing side of a right triangle.
- Finding the square root of a number.
- Using the *Distance Formula** to find the distance between two points
- Determining to which number set(s) a number belongs (counting numbers? integers? rational numbers? irrational numbers? real numbers? or more than one of the above?)
- Finding the **perimeter** of a *triangle**, *rectangle**, *parallelogram**, or *circle** (except with a circle it is called the circumference)
- Finding the **area** of a *triangle**, *rectangle**, *parallelogram**, or *circle**
- Finding the **volume** of a *rectangular prism**, *pyramid**, *cylinder**, *cone**, or *sphere**
- Finding the **surface area** of a *rectangular prism**, or *cylinder**
- Applying any of the above to a real-world situation

**It would be a good idea to look up and write down the formulas/theorems needed for these problems and have that paper with you when you take the test.*